



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-1105; Product Identifier 2017-SW-023-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Bell Helicopter Textron Canada Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for Bell Helicopter Textron Canada (BHTC) Model 427 helicopters. This proposed AD would require inspecting the inboard skin of the vertical fin around the four tailboom attachment points. This proposed AD is prompted by reports of cracked vertical fin skins that resulted from metal fatigue. The actions of this proposed AD are intended to prevent an unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.

- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-1105; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the Transport Canada AD, the economic evaluation, any comments received, and other information. The street address for Docket Operations (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed rule, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l’Avenir, Mirabel, Quebec J7J1R4; telephone (450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at <http://www.bellcustomer.com/files/>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

**FOR FURTHER INFORMATION CONTACT:** Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email [matthew.fuller@faa.gov](mailto:matthew.fuller@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

### **Discussion**

Transport Canada, which is the aviation authority for Canada, has issued Canadian AD No. CF-2017-03, dated January 31, 2017, to correct an unsafe condition for BHTC Model 427 helicopters with vertical fin part number (P/N) 427-035-840-105 or P/N 427-035-840-109 installed. Transport Canada advises of three reports of cracked vertical fin skins that resulted from metal fatigue. If not detected, the crack may grow to a critical length, causing the fin to fail, separate from the helicopter and damage the main

or tail rotor blades, leading to their in-flight failure. Loss of the fin may also adversely affect the helicopter's directional stability, leading to loss of directional control, Transport Canada advises.

Transport Canada consequently requires repetitively inspecting the vertical fins for a crack, and if a crack is detected, replacing the fin before further flight.

### **FAA's Determination**

These helicopters have been approved by the aviation authority of Canada and are approved for operation in the United States. Pursuant to our bilateral agreement with Canada, Transport Canada, its technical representative, has notified us of the unsafe condition described in its AD. We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition is likely to exist or develop on other products of the same type design.

### **Related Service Information Under 1 CFR part 51**

We reviewed Bell Helicopter Alert Service Bulletin 427-15-38, Revision A, dated November 14, 2016, which specifies recurring inspections of the vertical fins every 100 hours time-in-service (TIS) once the vertical fin has accumulated 1,500 hours TIS. This inspection also was incorporated in Chapter 4 of the maintenance manual. This service information also specifies that serial numbers be assigned to vertical fins that do not have a serial number.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **Proposed AD Requirements**

This proposed AD would require within 25 hours TIS or before the helicopter has accumulated 1,500 hours TIS, whichever occurs later and thereafter at intervals not to exceed 100 hours TIS:

- Removing and cleaning the vertical fin attachment area.
- Using a 10X magnifying glass, visually inspecting the inboard skin of the vertical fin around the four tailboom attachment points for a crack and replacing the fin before further flight if there is a crack.
- Assigning a serial number if the vertical fin does not have a serial number.

## **Costs of Compliance**

We estimate that this proposed AD would affect 27 helicopters of U.S. Registry and that labor costs average \$85 a work hour. Based on these estimates, we expect the following costs:

- Performing the visual inspection would require 2.25 work-hours and no parts for a cost of about \$191 per helicopter and \$5,157 for the U.S. fleet per inspection cycle.
- Replacing the fin would require 4 work-hours, and parts would cost \$10,000, for a cost of \$10,340 per helicopter.
- Assigning a serial number to the fin would require 0.5 work-hour for a cost of \$43 per helicopter.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

“Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Bell Helicopter Textron Canada Limited:** Docket No. FAA-2017-1105; Product Identifier 2017-SW-023-AD.

##### **(a) Applicability**

This AD applies to Bell Helicopter Textron Canada Limited Model 427 helicopters with a vertical fin part number (P/N) 427-035-840-105 or P/N 427-035-840-109 installed, certificated in any category.

##### **(b) Unsafe Condition**

This AD defines the unsafe condition as a crack on the vertical fin skin. This condition could lead to structural failure of the fin, separation of the skin from the helicopter, damage to the main or tail rotor blades and loss of helicopter control.

**(c) Comments Due Date**

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Within 25 hours time-in-service (TIS) or before the helicopter has accumulated 1,500 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 100 hours TIS:

(1) Remove the vertical fin and clean the vertical fin attachment area with a soap solution to remove all traces of dirt, stains, exhaust residue, and oil. Rinse the area with water and let dry.

(i) Using a 10X power magnifying glass, visually inspect the inboard skin of the vertical fin for a crack around the four tailboom attachment points as depicted in Figure 1 of Bell Helicopter Alert Service Bulletin 427-15-38, Revision A, dated November 14, 2016. Pay particular attention to the upper aft attachment point.

(ii) If there is a crack, replace the vertical fin before further flight.

(2) If the vertical fin does not have a serial number, assign a serial number using the helicopter serial number, and permanently mark the new serial number on the vertical fin data plate. Create a component history card or equivalent record and annotate the serial number.



**(f) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

The subject of this AD is addressed in Transport Canada AD No. CF-2017-03, dated January 31, 2017. You may view the Transport Canada AD on the Internet at <http://www.regulations.gov> in the AD Docket.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 5300, Fuselage Structure  
(General).

Issued in Fort Worth, Texas, on May 16, 2018.

Scott A. Horn,

Deputy Director for Regulatory Operations,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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